

In the Claims:

Please amend the claims of the above-identified application as follows:

1. (Currently Amended) A disk cartridge, comprising:

a first cartridge containing a first disk recording medium having a first diameter, said first cartridge having plural holes, which have different radial positions with respect to a disk center respectively, the plural holes being indicative of a relationship between said first diameter and a predetermined diameter of a second disk recording medium contained in a second disk cartridge that is different from said first diameter of said first disk recording medium contained in said first cartridge, wherein said holes are indicative of said disk recording medium diameters of each of said first and second disk recording mediums or an outermost operational movement of a pickup of a disk recording and reproducing apparatus for receiving said first cartridge or said second cartridge and reading data from or recording data to said first disk recording medium or said second disk recording medium, and wherein a hole is provided in said second cartridge, and a hole in said first cartridge is provided at the same coordinate position or a same radial position as said hole in said second cartridge with respect to a disk center location in said disk recording and reproducing apparatus, regardless of the respective diameters of said first and second disk recording mediums in said first and second cartridges.

2. Canceled, without prejudice.

3. Canceled, without prejudice.

4. (Currently Amended) ~~The~~ A disk cartridge, comprising:
 - a first cartridge containing a first disk recording medium having a first diameter, said first cartridge including:
 - at least one hole indicative of a relationship between said first diameter and a predetermined diameter of a second disk recording medium contained in a second disk cartridge that is different from said first diameter of said first disk recording medium contained in said first cartridge,
 - wherein said at least one hole is provided so as to indicate the disk diameter of each disk recording medium or an outermost peripheral position during movement of a pickup, and
 - wherein a length of said at least one hole is indicative of
 - (a) a minimum disk diameter of said first disk recording medium contained in said first cartridge or
 - (b) said outermost operational position of said pickup.
5. (Previously Presented) A disk recording and reproducing apparatus, comprising:
 - a. a pickup for recording and/or reproducing information to/from a disk cartridge disposed therein,
 - said disk cartridge including:
 - a first cartridge containing a first disk recording medium having a first diameter, and a plurality of holes, which have different radial positions with respect to a disk center respectively, the plurality of holes being indicative of a relationship between said first diameter and a predetermined diameter of a second disk recording medium contained in a second disk cartridge that is different from said first diameter of said first disk recording medium contained in said first cartridge; and

- b. a restricting member for restricting a movement of said pickup in an outward radial direction relative to a disk recording medium positioned in said recording and reproducing apparatus to not less than a predetermined radius, wherein said restricting member detects said disk diameter of the disk recording medium positioned in said recording and reproducing apparatus through one of said plurality of holes and restricts radial movement of said pickup to not less than said predetermined radius.
- 6. (Previously Presented) The disk recording and reproducing apparatus according to claim 5, further comprising a chassis which includes said restricting member, said restricting member being made up of a plurality of restricting pins, said restricting pins being provided so as to project either toward a cartridge loaded into said disk recording and reproducing apparatus or toward a pickup housing at a position indicative of (i) a disk diameter of a disk recording medium having a maximum disk diameter or (ii) an outermost operational position of said pickup,

wherein when a second disk cartridge containing a disk recording medium having a different diameter from that of said disk recording medium contained in said first cartridge has been loaded into said recording and reproducing apparatus, at least one of said restricting pins contacts a lower surface of said loaded disk cartridge and is pushed toward said pickup housing from said chassis so as to restrict the outermost operational position of said pickup, whereas at least one of said restricting pins located radially inwardly relative to said restricting pins pushed toward said pickup housing extend into a hole in said second cartridge so as to avoid projecting toward said pickup housing from said chassis.

7. (Previously Presented) The disk recording and reproducing apparatus according to claim 6,

wherein each of said restricting pins is pushed out by an elastic material so as to tend to project toward a cartridge loaded into said chassis.

8. (Previously Presented) The disk recording and reproducing apparatus according to claim 6, wherein a restricting pin provided at a position indicating the diameter of the disk recording medium having a maximum disk diameter or the outermost operational position of said pickup, is fixed so as to project toward said pickup housing of said chassis.

9. (Previously Presented) The disk recording and reproducing apparatus according to claim 7, wherein a restricting pin provided at a position indicating the diameter of the disk recording medium having a maximum disk diameter or the outermost operational position of said pickup, is fixed so as to project toward said pickup housing of said chassis.
10. (Currently Amended) A disk recording and reproducing apparatus, comprising:
- a. a pickup for recording and reproducing of a disk cartridge;
said disk cartridge having a plurality of holes, which have different radial positions with respect to a disk center respectively, the plurality of holes being indicative of a relationship between said first disk diameter of a disk recording medium contained therein or an outermost operational position of a pickup, and
 - b. a restricting member for restricting movement of said pickup in an outward operational direction to a distance which is not less than a predetermined radius,
- wherein said restricting member detects a disk diameter through one of said plurality of holes and restricts movement of said pickup in said outward operational direction to a distance which is not less than said predetermined radius.

11. (Currently Amended) The disk recording and reproducing apparatus according to claim 10, comprising a chassis including a restricting member, said restricting member comprising of a plurality of restriction pins wherein those of said restriction pins located at a position corresponding to a hole in said loaded cartridge project toward said cartridge and those of said restriction pins located at a position indicating a maximum disk diameter of said disk recording medium or the outermost operational position of said pickup project toward a pickup housing, and wherein when a disk cartridge containing a disk recording medium having a second diameter different from said first diameter is loaded into said recording and reproducing apparatus, at least one of said restricting pins of the chassis contacts the lower surface of the loaded disk cartridge and is pushed toward the pickup housing from said chassis so as to restrict the outermost operational position of said pickup, whereas at least one other of said restricting pins located radially inwardly of said at least one restricting pin extends into a hole in said loaded cartridge containing said second diameter disk recording medium so as to avoid projecting toward said pickup housing from said chassis.

12. (Previously Presented) The disk recording and reproducing apparatus according to claim 11, wherein each of said restricting pins is pushed out by an elastic material so as to tend to project toward a cartridge loaded into said chassis.

13. (Previously Presented) The disk recording and reproducing apparatus according to claim 11, wherein a restricting pin is provided at the position which indicates the maximum disk diameter of a disk recording medium or at the outermost operational position of said pickup, and that restricting pin is fixed so as to project toward said pickup housing of said chassis.

14. (Previously Presented) The disk recording and reproducing apparatus according to claim 12, wherein a restricting pin is provided at the position which indicates the maximum disk diameter of a disk recording medium or at the outermost operational position of said pickup, and that restricting pin is fixed so as to project toward said pickup housing of said chassis.

15. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- a. a pickup for recording and reproducing of a disk cartridge;
said disk cartridge including ÷ a first cartridge containing a first disk recording medium having a first diameter, and a plurality of holes, which have different radial positions with respect to a disk center respectively, the plurality of holes being indicative of a relationship between a second disk diameter of a second disk recording medium contained in a second disk cartridge and said first disk diameter, said second disk diameter being different from said first disk diameter, and said plurality of holes being provided so as to indicate the disk diameter of said each disk recording medium or an ~~outer-most~~ outermost operational position of said pickup,
said plurality of holes of said each cartridge being
provided at the same coordinate positions or at the same radial positions with respect to a disk center of said disk recording and reproducing apparatus, regardless of the respective diameters of said disk recording mediums,
and
- b. a restricting member for restricting a movement of said pickup in an outward operational direction to not less than a predetermined radius, wherein said restricting member detects a disk diameter through one of said plurality of holes and restricts said movement of said pickup in said outward operational direction to not less than said predetermined radius.

16. (Currently Amended) The disk recording and reproducing apparatus according to claim 15, further comprising a chassis which includes the restricting member, the restricting member being made up of a plurality of radially disposed restricting pins, said restricting pins being provided so as to project either toward a cartridge loaded into said disk recording and reproducing apparatus or toward a pickup housing at a position indicative of (i) a disk diameter of a disk recording medium having a maximum disk diameter or (ii) an outermost operational position of said pickup, wherein when a second disk cartridge containing a disk recording medium having a different diameter from that of said disk recording medium contained in said first cartridge has been loaded into said recording and reproducing apparatus, at least one of said restricting pins contacts a lower surface of said loaded disk cartridge and is pushed toward said pickup housing from said chassis so as to restrict the outermost operational position of said pickup, whereas at least one of said restricting pins located radially inwardly relative to said restricting pins pushed toward said pickup housing extend into a hole in said second cartridge so as to avoid projecting toward said pickup housing from said chassis.

17. (Previously Presented) The disk recording and reproducing apparatus according to claim 16, wherein each of said restricting pins is pushed out by an elastic material so as to tend to project toward said cartridge of said chassis.

18. (Currently Amended) The disk recording and reproducing apparatus according to claim 16, wherein one of said restricting pins provided at said position indicating a maximum one of said disk diameters of said disk recording mediums or said ~~outer most~~ outermost operational position of said pickup, is fixed so as to project toward said pickup housing of said chassis.

19. (Currently Amended) The disk recording and reproducing according to claim 17, wherein the one of said restricting pins provided at said position indicating a maximum one of said disk diameters of said disk recording mediums or said ~~outer most~~ outermost operational position of said pickup, is fixed so as to project toward said pickup housing of said chassis.

20. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- a. a pickup for recording and reproducing a disk cartridge;
said disk cartridge including: a first cartridge containing a first disk recording medium having a first diameter
at least one hole for recognizing a relation in size between a second diameter of a second disk recording medium contained in a second disk cartridge, said second disk diameter being different from said first disk diameter,
said hole being ~~provide~~ provided so as to indicate said disk diameters of each of said disk recording mediums or an ~~outer most~~ outermost operational position of said pickup, a length of said hole being indicative of a difference in disk diameter between a minimum diameter disk recording medium and (a) said first diameter of said first disk recording medium or (b) the ~~outer most~~ outermost operational position of said pickup, and

- b. a restricting member for restricting a movement of said pickup in an outward radial direction to not less than a predetermined radius, wherein said restricting member detects said minimum disk diameter through said hole and restricts the movement of said pickup in said ~~outer~~ outward radial direction to not less than said predetermined of radius.

21. (Currently Amended) The disk recording and reproducing apparatus according to claim 20, further comprising a chassis which includes the restricting member, the restricting member being made up of a plurality of radially disposed restricting pins, said restricting pins being provided so as to project either toward a cartridge loaded into said disk recording and reproducing apparatus or toward a pickup housing at a position indicative of (i) a disk diameter of a disk recording medium having a maximum disk diameter or (ii) an outermost operational position of said pickup, wherein when a second disk cartridge containing a disk recording medium having a different diameter from that of said disk recording medium contained in said first cartridge has been loaded into said disk recording and reproducing apparatus, at least one of said restricting pins contacts a lower surface of said second loaded disk cartridge and is pushed toward said pickup housing from said chassis so as to restrict the outermost operational position of the pickup, whereas at least one of said restricting pins located radially inwardly relative to said restricting pins pushed toward said pickup housing extend into a hole in said second cartridge so as to avoid projecting toward said pickup housing from said chassis.

22. (Previously Presented) The disk recording and reproducing apparatus according to claim 21, wherein each of said restricting pins is pushed out by an elastic material so as to tend to project toward said cartridge in said chassis.
23. (Currently Amended) The disk recording and reproducing apparatus according to claim 21, wherein the one of said restricting pins provided at said position indicative of said maximum diameter of said disk recording mediums or said ~~outer most~~ outermost operational position of said pickup, is fixed so as to project toward said pickup housing of said chassis.
24. (Currently Amended) The disk recording and reproducing apparatus according to claim 22, wherein the one of said restricting pins provided at said position indicative of said maximum diameter of said disk recording mediums or said ~~outer most~~ outermost operational position of said pickup, is fixed so as to project toward said pickup housing of said chassis.

25. (Currently Amended) A disk recording and reproducing apparatus, comprising:

(a) a pickup for recording and reproducing a disk cartridge;

said disk cartridge including: a first cartridge containing a first disk recording medium having a first diameter,

at least one hole for recognizing a relation in size between a a second disk recording medium having a second diameter of contained in a

second disk recording medium and said first diameter, said second diameter being different from said first diameter, said hole being

indicative of said disk diameters of said disk recording mediums or an

~~outer most~~ outermost operational position of a pickup, a length of said

hole being indicative of (a) a difference in disk diameter between a disk recording medium having a minimum disk diameter and said first

diameter of said first disk recording medium or (b) the ~~outer most~~

outermost operational position of said pickup,

said apparatus having a structure in which a length of said hole is detected

so as to mechanically define a movable outer operational position of said pickup.

26. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- a. a pickup for recording and reproducing of a disk cartridge;
said disk cartridge including: a first cartridge containing a first disk recording medium having a first diameter, and at least one hole for recognizing a relation in size between a disk diameter of a second disk recording medium contained in a second cartridge different from said first disk diameter, said hole being indicative of said disk diameters of said disk recording mediums or an ~~outer-most~~ outermost operational position of a pickup, a length of said hole being indicative of (a) a difference between a disk diameter of a minimum disk recording medium diameter and said first diameter of said first disk recording medium or (b) the ~~outer-most~~ outermost operational position of said pickup, and
- b. a chassis,
said chassis including a single restriction pin provided so as to be movable radially and to contact said pickup, said restriction pin being inserted into said hole of each of said cartridges during its loading into said apparatus.

27. (Currently Amended) A disk recording and reproducing apparatus, comprising:
- a. a pickup for recording data to and/or reproducing data from ~~with respect to~~ disk cartridges, wherein each said disk cartridge contains a disk recording medium and different disk cartridges contain disk recording media having different diameters relative to each other, said disk cartridges each having a plurality of holes therein which have different radial positions with respect to a disk center respectively, the plurality of holes being indicative of a relationship between a disk recording ~~media~~ medium diameter of one cartridge and a predetermined disk recording medium diameter of another cartridge that is different from the diameter of the disk recording medium contained in the one cartridge, and
 - b. a chassis, including:
 - a restricting member which engages and exerts pressure against a cartridge loaded into said disk recording and reproducing apparatus and is disposed in contact with said pickup when a disk cartridge is loaded into said disk recording and reproducing apparatus so as to restrict movement of said pickup in an outward radial direction to a distance not less than a predetermined radius.

28. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- (a) a pickup for recording data to and/or reproducing data from ~~with respect to~~ a disk cartridges, wherein each said disk cartridge contains a disk recording medium and different disk cartridges respectively each contain disk recording media having different disk diameters relative to each other, and
- (b) restricting means for restricting movement of said pickup in accordance with maximum pickup movement indicia provided by a disk cartridge loaded into said disk recording and reproducing apparatus, the loaded disk cartridge having plural holes, which have different radial positions with respect to a disk center respectively, the said plural holes being indicative of (i) a relationship between said a first diameter of a first disk recording medium contained in said loaded disk cartridge and a predetermined diameter of a second disk recording medium contained in a another second disk cartridge that is different from said first diameter of said first disk recording medium contained in said first loaded disk cartridge, or (ii) an outermost operational movement of said pickup of said disk recording and reproducing apparatus.

wherein a hole is provided in said another cartridge, and a hole in said loaded cartridge is provided at the same coordinate position or a same radial position as said hole in said another cartridge with respect to a disk center location in said disk recording and reproducing apparatus, regardless of the respective diameters of said first and second disk recording mediums.

29. (Previously Presented) The disk recording and reproducing apparatus according to claim 28, further comprising:

determining means for determining said maximum pickup movement indicia of said loaded cartridge.